Broad Exhaust Fired Absorption Chiller 2,500 RT

5 MW Solar Turbine

Burns & McDonnell CHP System Team

Benefits of CHP

Capital Cost Reduction
Packaged systems can cut CHP system capital costs by 15% to 30%.

Shorter & Less Expensive Installation
IES can reduce CHP system installation time by as much as two-thirds, and provide corresponding installation cost savings.

Replicability
System designs are suitable for multiple applications in facilities around the country.

Optimize Facility Energy Use
Packaged systems allow facility operators to manage power generation, cooling and heating to optimize energy use as well as reduce electricity use during peak periods.

Simplified Systems
The use of exhaust-fired absorption chillers eliminates the need for steam/hot water generation equipment.

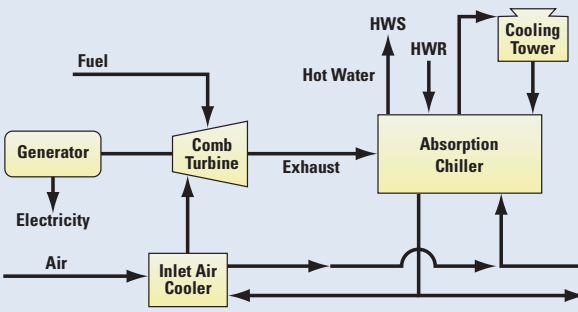
Modularity
This system can be built up in modular increments matched to your facility needs, and can be easily expanded as the need arises.

Experience the Benefits – Become a Demonstration Site

Considering a CHP system? The U.S. Department of Energy is looking for businesses interested in serving as demonstration sites for packaged CHP systems. For more information, please visit www.eere.energy.gov/chp/hospitals.

Project Overview

Burns & McDonnell has teamed with Broad USA, Solar Turbines and Austin Energy to develop a modular system that integrates on-site/near-site power generation and thermally activated technologies to serve a micro utility grid in Austin Texas.



Basic Combined Cycle, Electricity and Chilled Water or Hot Water

System Design Concept

Burns & McDonnell SINCE 1898

Solar Turbines A Caterpillar Company

Broad USA

AUSTIN ENERGY

Objectives

- Energy uses for prototype Integrated Energy System (IES):
  - Electricity to local area and electric grid
  - Chilled water for air conditioning and inlet air cooling for gas turbine
  - Space heating for IES plant
- Cost savings through efficiency: 70%-80%
- Integrated control system that will allow ease of operations and remote monitoring
- Modular design will be adaptable to meet various capacity requirements, space limitations, and grid interconnection
- Improve reliability with proven on-site generation technologies that isolate facilities from grid power quality problems and outages

Project Contacts:

Rod Schwass
Program Manager, Burns & McDonnell Engineering
(816) 822-4213 • rschwass@burnsmcd.com

Ed Mardiat
Director of CHP Development, Burns & McDonnell
(816) 822-3344 • emardiat@burnsmcd.com

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MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

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